

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/590,551
Source: IFWP
Date Processed by STIC: 9/1/06

ENTERED



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/590,551

DATE: 09/01/2006
TIME: 12:09:28

Input Set : A:\Sequence listing.txt
Output Set: N:\CRF4\09012006\J590551.raw

3 <110> APPLICANT: Genomine, Inc.
4 POSTECH FOUNDATION
6 <120> TITLE OF INVENTION: Novel phytochrome-interacting protein and a use thereof
8 <130> FILE REFERENCE: OP05-1002
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/590,551
C--> 10 <141> CURRENT FILING DATE: 2006-08-24
10 <150> PRIOR APPLICATION NUMBER: KR 10-2004-0013663
11 <151> PRIOR FILING DATE: 2004-02-27
13 <160> NUMBER OF SEQ ID NOS: 15
15 <170> SOFTWARE: KopatentIn 1.71
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 29
19 <212> TYPE: DNA
20 <213> ORGANISM: Artificial Sequence
22 <220> FEATURE:
23 <223> OTHER INFORMATION: PCR primer
26 <400> SEQUENCE: 1
27 ggatccaaat gtcaggctc aggccgact 29
30 <210> SEQ ID NO: 2
31 <211> LENGTH: 30
32 <212> TYPE: DNA
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: PCR primer
39 <400> SEQUENCE: 2
40 ctgcagctac ttgttgctg cagcgagtcc 30
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 1455
45 <212> TYPE: DNA
46 <213> ORGANISM: Arabidopsis thaliana
48 <400> SEQUENCE: 3
49 atggagacca agaatgagaa ttctgatgtt tcacggcag aggagttaa aagtcaggcc 60
51 aacaaggctt ttaaaaggctca caaatactcc agtgctattg atctatatac aaaagctatt 120
53 gaactcaaca gcaacaacgc tggatattgg gcaaatcgat cattgctca cacaactg 180
55 gaggaaatcg acaggatgca tcgaaggcca ttgaagttga ttcaagatac 240
57 tctaaaggctt attacaggcg tggatgtcg tatcttgcctt tggaaaatt taaggatgcc 300
59 ttgaaggact tccaaacaggt aaaaaggctt tctcctaattg accctgtatgc cacaagaaag 360
61 ctaaaggat gtgagaaatc agtgatgaaa ctcaaattt aagaagcaat ctctgtgcc 420
63 gtatctgaaa ggcgttcgt agctgatgtcc attgacttcc atacaataga ggttggcc 480
65 caatattctg gtgctagaat tgagggagag gaagtacact tagatttgt gaaaacatgt 540
67 atggaggatt ttaagaacca aaaaacattt cataaactgtt atgccttatca aatgttta 600
69 cagacttaggc aaatctgtt acgactgttcc tctctgtt atataagtgt tccacatggc 660
71 aaacatataca ctgtttgcgg tgacgttcat ggtcagttct acgatcttca caatatctt 720

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73	gagcttaatg	gcctcccttc	ggaggagaac	ccatacctat	ttaatggcga	ctttgtggac	780										
75	agaggctcat	tctccgttga	gatcatcctc	actttgtttg	cttcaagtg	catgtgccca	840										
77	tcatccatat	atctagccag	aggaaaccat	gaaagcaaga	gcatgaacaa	aatttatggt	900										
79	tttgggggtg	aggttcggtc	caagttgagt	aaaaaattcg	tggatcttt	tgctgaagtt	960										
81	ttctgttacc	tcccgttggc	tcatgttata	aatgggaagg	tcttcgtgg	acatggaggt	1020										
83	cttttcagtg	ttgacggcgt	gaaactctca	gacatcagag	ccattgacag	attctgtgag	1080										
85	ccaccagagg	aaggactaat	gtgtgaacta	tttgaggatg	atcctcaacc	tctccctgga	1140										
87	agaggcccaa	gcaagcgagg	agttggctca	tcattttgt	gagatgtgac	aaagagggtt	1200										
89	ttgcaagata	acaatttaga	tttgggtgtc	cggtcacatg	aagtaaaaga	tgaaggttat	1260										
91	gaggtgaac	atgacgtaa	actcataact	gtcttcctc	cgc当地atta	ctgtgatcag	1320										
93	atggtaata	agggagcctt	cattcggttt	gaagctcctg	atatgaagcc	aaacattgtt	1380										
95	acattctcag	cagtgcctca	tccggatgtg	aagcctatgg	catatgcaaa	caacttctc	1440										
97	aggatgttca	actaa					1455										
100	<210>	SEQ ID NO:	4														
101	<211>	LENGTH:	484														
102	<212>	TYPE:	PRT														
103	<213>	ORGANISM:	Arabidopsis thaliana														
105	<400>	SEQUENCE:	4														
106	Met	Glu	Thr	Lys	Asn	Glu	Asn	Ser	Asp	Val	Ser	Arg	Ala	Glu	Glu	Phe	
107	1			5			10				15						
109	Lys	Ser	Gln	Ala	Asn	Glu	Ala	Phe	Lys	Gly	His	Lys	Tyr	Ser	Ser	Ala	
110				20			25				30						
112	Ile	Asp	Leu	Tyr	Thr	Lys	Ala	Ile	Glu	Leu	Asn	Ser	Asn	Asn	Ala	Val	
113				35			40				45						
115	Tyr	Trp	Ala	Asn	Arg	Ala	Phe	Ala	His	Thr	Lys	Leu	Glu	Glu	Tyr	Gly	
116				50			55				60						
118	Ser	Ala	Ile	Gln	Asp	Ala	Ser	Lys	Ala	Ile	Glu	Val	Asp	Ser	Arg	Tyr	
119				65			70				75					80	
121	Ser	Lys	Gly	Tyr	Tyr	Arg	Arg	Gly	Ala	Ala	Tyr	Leu	Ala	Met	Gly	Lys	
122					85			90								95	
124	Phe	Lys	Asp	Ala	Leu	Lys	Asp	Phe	Gln	Gln	Val	Lys	Arg	Leu	Ser	Pro	
125					100			105								110	
127	Asn	Asp	Pro	Asp	Ala	Thr	Arg	Lys	Leu	Lys	Glu	Cys	Glu	Lys	Ala	Val	
128					115			120				125					
130	Met	Lys	Leu	Lys	Phe	Glu	Glu	Ala	Ile	Ser	Val	Pro	Val	Ser	Glu	Arg	
131					130			135				140					
133	Arg	Ser	Val	Ala	Glu	Ser	Ile	Asp	Phe	His	Thr	Ile	Glu	Val	Glu	Pro	
134					145			150				155				160	
136	Gln	Tyr	Ser	Gly	Ala	Arg	Ile	Glu	Gly	Glu	Glu	Val	Thr	Leu	Asp	Phe	
137						165			170				175				
139	Val	Lys	Thr	Met	Met	Glu	Asp	Phe	Lys	Asn	Gln	Lys	Thr	Leu	His	Lys	
140						180			185				190				
142	Arg	Tyr	Ala	Tyr	Gln	Ile	Val	Leu	Gln	Thr	Arg	Gln	Ile	Leu	Leu	Ala	
143						195			200			205					
145	Leu	Pro	Ser	Leu	Val	Asp	Ile	Ser	Val	Pro	His	Gly	Lys	His	Ile	Thr	
146						210			215			220					
148	Val	Cys	Gly	Asp	Val	His	Gly	Gln	Phe	Tyr	Asp	Leu	Leu	Asn	Ile	Phe	
149						225			230			235				240	
151	Glu	Leu	Asn	Gly	Leu	Pro	Ser	Glu	Glu	Asn	Pro	Tyr	Leu	Phe	Asn	Gly	

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152 245 250 255
 154 Asp Phe Val Asp Arg Gly Ser Phe Ser Val Glu Ile Ile Leu Thr Leu
 155 260 265 270
 157 Phe Ala Phe Lys Cys Met Cys Pro Ser Ser Ile Tyr Leu Ala Arg Gly
 158 275 280 285
 160 Asn His Glu Ser Lys Ser Met Asn Lys Ile Tyr Gly Phe Glu Gly Glu
 161 290 295 300
 163 Val Arg Ser Lys Leu Ser Glu Lys Phe Val Asp Leu Phe Ala Glu Val
 164 305 310 315 320
 166 Phe Cys Tyr Leu Pro Leu Ala His Val Ile Asn Gly Lys Val Phe Val
 167 325 330 335
 169 Val His Gly Gly Leu Phe Ser Val Asp Gly Val Lys Leu Ser Asp Ile
 170 340 345 350
 172 Arg Ala Ile Asp Arg Phe Cys Glu Pro Pro Glu Glu Gly Leu Met Cys
 173 355 360 365
 175 Glu Leu Leu Trp Ser Asp Pro Gln Pro Leu Pro Gly Arg Gly Pro Ser
 176 370 375 380
 178 Lys Arg Gly Val Gly Leu Ser Phe Gly Gly Asp Val Thr Lys Arg Phe
 179 385 390 395 400
 181 Leu Gln Asp Asn Asn Leu Asp Leu Leu Val Arg Ser His Glu Val Lys
 182 405 410 415
 184 Asp Glu Gly Tyr Glu Val Glu His Asp Gly Lys Leu Ile Thr Val Phe
 185 420 425 430
 187 Ser Ala Pro Asn Tyr Cys Asp Gln Met Gly Asn Lys Gly Ala Phe Ile
 188 435 440 445
 190 Arg Phe Glu Ala Pro Asp Met Lys Pro Asn Ile Val Thr Phe Ser Ala
 191 450 455 460
 193 Val Pro His Pro Asp Val Lys Pro Met Ala Tyr Ala Asn Asn Phe Leu
 194 465 470 475 480
 196 Arg Met Phe Asn
 200 <210> SEQ ID NO: 5
 201 <211> LENGTH: 24
 202 <212> TYPE: DNA
 203 <213> ORGANISM: Artificial Sequence
 205 <220> FEATURE:
 206 <223> OTHER INFORMATION: PCR primer
 209 <400> SEQUENCE: 5
 210 ggatccatgg agaccaagaa tgag 24
 213 <210> SEQ ID NO: 6
 214 <211> LENGTH: 24
 215 <212> TYPE: DNA
 216 <213> ORGANISM: Artificial Sequence
 218 <220> FEATURE:
 219 <223> OTHER INFORMATION: PCR primer
 222 <400> SEQUENCE: 6
 223 ctcgagttag ttgaacatcc tgag 24
 226 <210> SEQ ID NO: 7
 227 <211> LENGTH: 28
 228 <212> TYPE: DNA

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Input Set : A:\Sequence listing.txt
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229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: PCR primer
235 <400> SEQUENCE: 7
236 ggatccgatg tcaggctcta ggccgact 28
239 <210> SEQ ID NO: 8
240 <211> LENGTH: 34
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: PCR primer
248 <400> SEQUENCE: 8
249 gctgatcagc atggttccg gagtcgggg tagt 34
252 <210> SEQ ID NO: 9
253 <211> LENGTH: 34
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: PCR primer
261 <400> SEQUENCE: 9
262 cccggccgga ctaatatggc atcatcagca tcat 34
265 <210> SEQ ID NO: 10
266 <211> LENGTH: 27
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: PCR primer
274 <400> SEQUENCE: 10
275 ctcgagtc aa gagattgctt cttcaaa 27
278 <210> SEQ ID NO: 11
279 <211> LENGTH: 27
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: PCR primer
287 <400> SEQUENCE: 11
288 ggatccatgc cagtatctga aaggcgt 27
291 <210> SEQ ID NO: 12
292 <211> LENGTH: 24
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial Sequence
296 <220> FEATURE:
297 <223> OTHER INFORMATION: PCR primer
300 <400> SEQUENCE: 12
301 atggagacca agaatgagaa ttct 24
304 <210> SEQ ID NO: 13
305 <211> LENGTH: 24
306 <212> TYPE: DNA
307 <213> ORGANISM: Artificial Sequence

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309 <220> FEATURE:
 310 <223> OTHER INFORMATION: PCR primer
 313 <400> SEQUENCE: 13
 314 ttagttgaac atcctgagaa agtt
 317 <210> SEQ ID NO: 14
 318 <211> LENGTH: 347
 319 <212> TYPE: PRT
 320 <213> ORGANISM: Arabidopsis thaliana
 322 <400> SEQUENCE: 14
 323 Ser Val Pro Val Ser Glu Arg Arg Ser Val Ala Glu Ser Ile Asp Phe
 324 1 5 10 15
 326 His Thr Ile Glu Val Glu Pro Gln Tyr Ser Gly Ala Arg Ile Glu Gly
 327 20 25 30
 329 Glu Glu Val Thr Leu Asp Phe Val Lys Thr Met Met Glu Asp Phe Lys
 330 35 40 45
 332 Asn Gln Lys Thr Leu His Lys Arg Tyr Ala Tyr Gln Ile Val Leu Gln
 333 50 55 60
 335 Thr Arg Gln Ile Leu Leu Ala Leu Pro Ser Leu Val Asp Ile Ser Val
 336 65 70 75 80
 338 Pro His Gly Lys His Ile Thr Val Cys Gly Asp Val His Gly Gln Phe
 339 85 90 95
 341 Tyr Asp Leu Leu Asn Ile Phe Glu Leu Asn Gly Leu Pro Ser Glu Glu
 342 100 105 110
 344 Asn Pro Tyr Leu Phe Asn Gly Asp Phe Val Asp Arg Gly Ser Phe Ser
 345 115 120 125
 347 Val Glu Ile Ile Leu Thr Leu Phe Ala Phe Lys Cys Met Cys Pro Ser
 348 130 135 140
 350 Ser Ile Tyr Leu Ala Arg Gly Asn His Glu Ser Lys Ser Met Asn Lys
 351 145 150 155 160
 353 Ile Tyr Gly Phe Glu Gly Glu Val Arg Ser Lys Leu Ser Glu Lys Phe
 354 165 170 175
 356 Val Asp Leu Phe Ala Glu Val Phe Cys Tyr Leu Pro Leu Ala His Val
 357 180 185 190
 359 Ile Asn Gly Lys Val Phe Val Val His Gly Gly Leu Phe Ser Val Asp
 360 195 200 205
 362 Gly Val Lys Leu Ser Asp Ile Arg Ala Ile Asp Arg Phe Cys Glu Pro
 363 210 215 220
 365 Pro Glu Glu Gly Leu Met Cys Glu Leu Leu Trp Ser Asp Pro Gln Pro
 366 225 230 235 240
 368 Leu Pro Gly Arg Gly Pro Ser Lys Arg Gly Val Gly Leu Ser Phe Gly
 369 245 250 255
 371 Gly Asp Val Thr Lys Arg Phe Leu Gln Asp Asn Asn Leu Asp Leu Leu
 372 260 265 270
 374 Val Arg Ser His Glu Val Lys Asp Glu Gly Tyr Glu Val Glu His Asp
 375 275 280 285
 377 Gly Lys Leu Ile Thr Val Phe Ser Ala Pro Asn Tyr Cys Asp Gln Met
 378 290 295 300
 380 Gly Asn Lys Gly Ala Phe Ile Arg Phe Glu Ala Pro Asp Met Lys Pro
 381 305 310 315 320

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/590,551

DATE: 09/01/2006

TIME: 12:09:29

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF4\09012006\J590551.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date